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ABSTRACT

Teachers can assume different roles in a distance education environment, but teachers should appreciate their importance in helping learners persist in a distance education activity. In order to discover what distance education students regarded as helpful teacher behaviors, a questionnaire was designed and mailed to 334 1993-94 graduates of the 10-month nursing management distance education program across Canada. The qualitative data were collected by two methods--a critical incident exercise and interviews--and analyzed through an inducted process and followed steps suggested by Van Kaam (1959) for analyzing written descriptions and Colaizzi (1978) for analyzing interview data. A total of 926 descriptions and explanations of the distance education experience were gleaned from 109 participants. The results of the study produced six general themes of teacher behavior that students regarded as important: teaching practices, evaluation practices, interpersonal relationships, personal characteristics, professional competence, and availability to students. Students contributed positive descriptions of how teacher behavior in each of these areas encouraged them to persist in their program. The study concluded that teachers may need to make more effort to engage in the behaviors the students regarded as helpful in order to encourage student persistence in the distance education programs. (Contains 19 references.) (KC)

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HELPING STUDENTS TO PERSIST IN A DISTANCE EDUCATION PROGRAM:

THE ROLE OF THE TEACHER

PRESENTED TO THE FACULTY OF NURSING

UNIVERSITY OF MANITOBA

by

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HELPING STUDENTS TO PERSIST IN A DISTANCE EDUCATION PROGRAM: THE ROLE OF THE TEACHER

INTRODUCTION

In order to place this presentation into context (for those of you without distance education experience), I want to share with you two stories. The first story is about a student in a traditional on-campus learning environment. The second is about a student in a northern community who is taking a university course by distance delivery. (Any resemblance to real people or events is purely coincidental!)

SCENARIO A: LEARNING ON-CAMPUS

Bill is a fourth year nursing student enrolled in the Leadership in Nursing Practice course on campus at the University of Manitoba. One day Bill comes out of a class session dealing with "change" and turns to his classmate (Susan) and says "I don't have a clue what that guy was talking about. He had me so confused about change theory that I was not even able to take notes". Now, a number of possible scenarios can unfold from this on-campus experience.

1. Bill can address his confusion and his questions directly to the teacher at the next class, or meet with the teacher at his earliest convenience, or
2. Susan can confirm that she too is confused, thus leaving Bill with the sense that he is not the only person alive who doesn't understand this content. They could then talk about some actions that can be taken in order to deal with this situation, or
3. Susan may say, "Well, I kept some notes and I think I understand some of this material. Lets

sit down together and see if we can make any sense out of it".

SCENARIO B: LEARNING AT A DISTANCE

Sarah is a Registered Nurse working at a nursing station in Cross Lake, a remote community in northern Manitoba. She is enrolled in the Baccalaureate program for Registered Nurses at the University of Manitoba and is taking Leadership in Nursing Practice by distance delivery. She received a package of instructional material (print and audiotapes) at the beginning of the course and has been submitting written assignments every six weeks to her teacher in Winnipeg. Part way through the course, she finds that she does not understand a particular area of content. The package of supplementary readings has not yet arrived by mail. She has not had a face-to-face meeting with her teacher and has had great difficulty reaching him by phone. When she does manage to get through to the University, she gets his voice mail box. The teacher has not yet returned her calls and she is not sure why. A number of scenarios can unfold from this off-campus experience:

1. Sarah, in the absence of other students, thinks that she is the only one not understanding this content. Her self-confidence gets eroded, that is, she begins to question her own ability to complete the course, or

2. Sarah procrastinates about the assignments. She wastes time worrying about not getting them done. Without teacher or peer support she flounders, gets frustrated, and eventually she drops out of the course.

Hopefully these brief vignettes have given you a sample of some of the different situations that on-campus and distance students can experience. The intent of sharing these with you is to set the scene for this presentation through which I will explore some of the findings

from my doctoral dissertation.

OBJECTIVES

By the end of this presentation participants will be able to:

1. identify the different roles that teachers may assume in a distance education environment
2. appreciate the importance of the teachers' role in helping learners persist in a distance education activity.

LITERATURE REVIEW

The literature review for this study looked at such concepts as motivation, participation, factors affecting persistence, distance education and learning, as well as barriers to participation and persistence. This presentation will focus on the areas of participation and distance education in relation to effective teacher behaviours.

The conceptual framework chosen for this study was the Chain-of-Response Model developed by Patricia Cross (1981). This model includes the involvement of both internal and external conditions leading to participation in an educational activity. Individual or internal learner variables include self-evaluation, attitudes about education, importance of goals, and the expectation that goals will be met through participation. External conditions affecting participation include life transitions, opportunities, barriers, and information. In general, Cross suggests that forces leading to participation, and hence persistence, begin with the individual and move to external forces. This model suggests that participation is not a single event, but rather a series or chain of responses. The Chain-of-Response model draws heavily from the works of Rubenson (expectancy model), Boshier, (congruence model), and Maslow (hierarchy of needs model).

Since the focus of this presentation is on effective teacher behaviours, an external factor in distance education, I will briefly turn to the literature related to this concept.

As a foundation for defining distance education, Keegan (1986) suggests that the following elements need to exist:

1. the separation of teacher and learner

2. the influence of the educational organization

3. the use of technical media to unite the teacher and learner and to carry the educational content

4. the provision of two-way communication so that the student may benefit from or even initiate dialogue

5. the possibility of occasional meetings for both didactic and socialization purposes (p. 38).

Borje Holmberg, a leader in distance education, believes that the most important feature of learning at a distance is "guided didactic conversation". Holmberg is convinced that the natural traits of successful conversation will promote learning and persistence.

Holmberg (1983) provides a description of the principles of guided didactic conversation as follows:

1. that feelings of personal relation between the teaching and learning parties promote study pleasure and motivation

2. that such feelings can be fostered by well developed self-instructional material and suitable two-way communication at a distance

3. that intellectual pleasure and study motivation are favourable to the attainment of study goals and the use of proper study processes and methods

4. that the atmosphere, language and conventions of friendly conversation favour feelings of

personal relations according to postulate #1

5. that messages given and received in conversation forms are comparatively easily understood and remembered

6. that the conversation concept can be successfully translated for use by media available to distance education

7. that planning and guiding the work, whether provided by the teaching organization or the student, are necessary for organized study, which is characterized by explicit or implicit goal concepts (p. 115-116).

Holmberg suggests that if a distance education offering is prepared using these principles, it will be attractive to prospective students, will motivate students to persist, and will facilitate the learning process.

The literature also suggests that students participating in distance education programs have a higher dropout rate than on- campus students. It is further postulated that effective teacher behaviour can have an positive effect upon reducing this dropout rate.

Turning to the field of nursing, most of the research on effective teacher behaviour is related to teaching in the clinical area. The lack of research about teacher behaviours in nursing courses offered at a distance further supports the need for this study. As a result of this review, plus my own personal experiences, the following research questions were developed:

1. What are the motivational and demographic characteristics of RNs participating in a nursing management distance education program?

2. What are the factors affecting motivation and persistence that RNs have experienced as learners in a distance education program?

RESEARCH DESIGN

A descriptive, exploratory research design was used to address the research questions in this study. It combined both quantitative and qualitative approaches. The descriptive, quantitative data was collected by a questionnaire mailed to 334 graduates of the ten month Nursing Management Distance Education Program (1993-94) across Canada. A convenience sample was used. The qualitative data was collected by two methods; a critical incident exercise and interviews . However, prior to that, I reflected upon my own experiences and beliefs about distance education and distance learning. I then formulated a list of my preconceived ideas and assumptions about this phenomenon. This process of "bracketing", according to Munhall (1994) lays out for the reader the researchers preunderstandings of the phenomenon being studied. As Munhall (1994) has stated "this activity should allow you to get out of your own way of perceiving something" (p. 61).

Using a critical incident exercise, participants were asked to describe in writing, positive and negative incidents or situations that affected their motivation to persist while they were students in the program. This exercise is an exploratory technique that has been shown to be reliable and valid in generating comprehensive and detailed written descriptions of experiences. This exercise was included as a separate section of the mailed questionnaires. This technique yielded a total of 926 written descriptions and explanations of the distance education experience from the 109 participants. Of that number, 276 were descriptions of teacher behaviours that affected persistence in the program. It is this data that will be analysed and described.

DATA ANALYSIS PROCEDURES

The data was analysed through an inductive process and followed the steps suggested by

Van Kaam (1959) for analysing written descriptions and Colaizzi (1978) for analysing interview data.

A. CRITICAL INCIDENT DATA (Van Kaam, 1959)

1. Each written expression that described some aspect of the distance learning experience was listed separately from the others

2. Similar expressions were grouped together and labelled

3. Irrelevant expressions were eliminated

4. Expressions that bore close relationship to one another were grouped and labelled

5. The identified core of common elements were checked against a random sample of original descriptions by participants. Discrepancies at that point were rechecked by the researcher.

6. The steps of analysis (1 to 5) were performed independently by an external reviewer familiar with qualitative research.

The last step was important as it helped to control for researcher bias. Guba and Lincoln (1989) affirm the importance of "assuring that data, interpretations, and outcomes of inquiry are rooted in contexts and persons apart from the evaluator and simply not figments of the evaluator's imagination" (p. 243). Having an independent judge validate the formulated meanings helped to ensure the confirmability that the researcher did not make unsubstantiated judgments.

The second method used was face-to-face and telephone interviews. The sampling technique for this approach was purposive sampling. Inclusion criteria for this approach included: (a) having volunteered to be interviewed, (b) having made an effort to make meaningful comments on the CIT, and (c) geographic dispersion. Interviews were conducted

from nurses across Western Canada. After 9 interviews, it was deemed that saturation of data had occurred.

Prior to interviews being conducted a disclaimer (consent form) was sent. All interviews were audiotaped and each lasted between 35 and 60 minutes. The interview began with the general question "What was it like to be a learner in a distance education program?" The audiotapes were transcribed shortly after each interview.

The analysis of these transcripts closely followed Colaizzi's (1978) method of (phenomenological) analysis. The procedural steps consisted of the following:

B. INTERVIEW DATA (Colaizzi, 1978)

1. The audiotapes were listened to several times. The transcripts were read through completely in order to become totally immersed in the data. Notes were made on general themes that emerged.

2. The transcripts were read through again and significant statements that directly related to the phenomenon were extracted. These statements were in the form of sentences and/or phrases.

3. Each significant statement was studied to formulate their meaning. These formulated meanings also considered the context in which they were stated.

4. Clusters of meanings were organized from the aggregate formulated meanings. This step allowed the emergence of themes that were common to all the participants' descriptions.

5. The theme clusters were then compared to the original descriptions in order to validate the clusters and to examine any discrepancies that existed.

6. An exhaustive description of the phenomenon was developed by integrating the results developed in the preceding steps.

7. Three participants reviewed the themes and descriptions for validation purposes. This process of validation is strongly supported by others (Guba & Lincoln, 1989; Oiler, 1986; Sandelowski, 1986; Swanson-Kauffman & Schonwald, 1988).

8. An external reviewer, well versed in qualitative research methodology, reviewed one of the transcripts and generated a list of categories independent of those generated by the researcher.

This data analysis technique yielded a total of 241significant statements. Of this total, 61 statements described teacher behaviour that pertained to students' ability to persist in the program.

RESULTS

The data collected through the critical incident exercise and interviews produced six general themes and 16 subthemes related to teacher behaviour in a distance education program. The general themes that emerged were:

Teaching Practices

Evaluation Practices

Interpersonal Relationships

Personal Characteristics

Professional Competence

Availability to Students

Each of these themes will be described using examples of the narrative feedback from the participants.

TEACHING PRACTICES

How teachers practice was a major theme that participants felt affected their ability to

persist in this distance program. The willingness of the teacher to clarify questions or concepts, usually by telephone contact, was deemed to be very important in promoting student understanding and success in the program.

> The teacher enlarged upon a question, rephrasing it so I could understand what was wanted and give the correct answer. By taking the time to re-word the question I was able to answer appropriately, receive a reasonable grade and understand what I was learning. (#301)

> She explained a question in ways that gave me a different perspective on it so that I found it easier to answer. It gave me the encouragement I needed to tap into my abilities.(#122)

Participants described the role of the teacher as a person who could provide them with the resources they were lacking. This was particularly evident from nurses who resided in the rural areas where access to resources was often a problem.

> She demonstrated her willingness to help in any way possible. Photocopying of difficult to find articles so we would not have to worry about finding them ourselves. (#93)

> Got me extra information because I didn't receive part of the package. This allowed me to complete the course. (#318)

Participants shared their experiences related to how their teacher encouraged problem solving strategies and why this was important to their development as a learner and as a manager.

> I found that she inspired me to think for myself, evaluate situations positively, and develop problem solving techniques. This was so effective because it helped me with situations I was faced with every day. She also taught me to communicate better with management and express the concerns we had on the unit in managerial terms. (#43)

Participants spoke highly of the value of receiving positive reinforcement from their teachers.

> Encouraging comments on the assignments. A cartoon with each assignment. She told me I had the top mark of her students for assignment #1. This made me work harder. I needed this for reassurance. (#157)

EVALUATION PRACTICES

The primary reason that teachers interacted with students in this distance environment was for evaluation purposes. Providing written feedback on assignments took many forms and had various effects upon the students' motivation to persist in the program. Encouragement to continue in the program was by far the most dominant result or outcome of positive teacher evaluation practices.

> (My teacher) congratulated me on an assignment well done, when I felt like I didn't understand a thing I was doing. (She) wrote comments all over my assignments. It gave me encouragement to continue. It made me realize that she put alot of thought into the constructive criticism of my papers. I felt like her only student. (#214)

> Provided excellent feedback on each assignment (both positive and areas of improvement). This provided encouragement and helped me get through to the end of the course, since you are on your own, this was exceedingly valuable. (#163)

One of the teacher attributes that students found beneficial was promptness in returning marked assignments.

> All papers contained a great deal of feedback and were returned promptly. This allowed me to apply the feedback to the next assignment and improve my chances of being successful. (#154)

Participants valued the feedback received in the form of constructive criticism from their teachers. These evaluative comments not only reinforced learning but encouraged persistence.

> My educational consultant always provided constructive criticism and praise on each assignment. Her little notes at the end of the assignment were always motivating. I had not participated in any courses (much to my shame) since graduation in 1984. I needed her encouragement and each assignment that came back motivated me to go on. (#251)

INTERPERSONAL RELATIONSHIPS

The type and extent of interpersonal relationship between the teacher and student was important from a motivational standpoint. The teacher was seen as being effective or helpful

when support and encouragement were offered in the verbal exchanges that occurred. This interaction was particularly appreciated when the teacher made the first contact with the student.

> She called me just to see how I was doing, to see if I needed any help regarding references. This helped by giving me support and encouragement that I needed as it had been a long time since I had really studied in that depth. It helped to know that she was there anytime I needed help. (#150)

Respect for the student as an individual and as a learner was highly valued by the participants.

> He was kind of an interesting fellow in that he asked us to send him a picture of ourselves so that he could hear us and know who he was talking to. And then he also had a video done of him where he did part of the first lecture and we watched the video so we could see what he looked like. So it was very interesting. (#6)

On the other hand, a lack of common courtesy to the student was seen as discouraging and contributed to a dysfunctional relationship.

> It was very difficult to catch up with her and messages weren't returned. She changed jobs and I had a work phone and a home phone number. I don't like to bother people at home about these kinds of things so I would phone her at work. I phoned her at work only to find that she no longer worked there and I didn't even know that. I finally quit calling. (#1)

PERSONAL CHARACTERISTICS

The personal characteristics of the teacher were an important factor in maintaining the students' motivation to persist in a distance education program. Because of the physical separation of the teacher and learner, the teacher must be aware of how he or she is perceived by the learner. This was paramount, as there was no opportunity for the teacher to visualize the effect they are having on the student and to correct for the misperception at the time.

An attitude of caring can and should be conveyed in a distance learning environment.

> She (my teacher) phoned me to inquire about the downsizing activities in my area of

> work. She offered support and understanding if I should need extensions for assignment deadlines. (#225)

On the negative side, a teacher who demonstrated an uncaring attitude did contribute to losing contact with that student.

> When I asked for guidance I was told "I can't give you the answer, think about it!" Students aren't trying to cheat! We look for guidance to understand the real issue to write our essay on. Such comments, when student was paying the cost, don't encourage you to call the instructor again, which is not part of the distance concept. (#161)

Showing a patient attitude towards students conveyed a sense of interest and commitment while an impatient manner contributed to feelings of imposition.

> She took the time over the phone to explain and provided me information and hints to pursue. It gave me reassurance that I was on the right track. (#230)

> I remembered one time specifically that I phoned in because I didn't understand what a particular question wanted. I phoned her and said: "I don't understand this question, can you help me?" But I meant, reword it so that I can understand it better. She gave me the answer! I thought, okay, you obviously don't want to talk to me right now. (#1)

PROFESSIONAL COMPETENCE

The professional competence of the teacher included not only the knowledge level but also the understanding of management issues in the health care system.

> She had a very wide base of knowledge that came through. I think part of it was that we had had similar experiences. So that made it a little more, like this person knows where I'm coming from. (#9)

> Asked specifically what I could not understand in the questions and through relating it to my work experiences with examples, helped clarify. She made use of my own personal experience at work and related it to theory. (#18)

AVAILABILITY TO STUDENTS

Having easy access to the teacher was considered to be very comforting to the student.

An approachable and available teacher instilled confidence in students to continue in the program.

> It was effective to have her available to phone when I wasn't sure of what the question wanted. It gave me the confidence to continue on; enabled me to continue each lesson on the right track. (#235)

> Very approachable and willing to help when I called her. In no way gave the impression that I was inconveniencing her. I was treated like an adult. (#96)

Trying to make contact with the teacher, however, was described as a frustrating experience for some distance learners.

> I felt that the problem with the preceptor was that those people are busy as well and just trying to coordinate time that was convenient for both of us when we didn't have set days or dates to phone was difficult. Because of how you progress through the program, I felt that it had to be more structured. (#7)

Triangulation

Excerpts from both the critical incident exercise and the interviews have been included in the above examples. The use of these two measures of a single construct (persistence) has strengthened the trustworthiness of the study. This "triangulation" has increased the credibility and confirmation of the findings as each method counterbalances the strengths and weaknesses of the other. Using two methods also adds to the completeness of the study as multiple dimensions of the phenomenon were described by participants. The use of two methods also helps to stimulate participant recall as one of the drawbacks of a retrospective study is the ability of participants to remember details of events.

INTERPRETATION OF RESULTS

These results can be interpreted by returning to the Cross chain-of-response framework.

We can look at teacher behaviour and how it affects persistence from three areas of this model: self-evaluation, importance of goals and expectations that participation will meet these goals, and the creation of opportunities and removal of barriers.

1. Self-evaluation

This concept suggests that motivation to persist in an educational activity is based upon the learner's self-confidence and self-concept. From the descriptions of the participants in this study there is an indication of the importance of the teacher in promoting learner confidence levels.

2. Importance of goals and expectation that participation will meet goals

Teachers need to recognize the goal-directed nature of RNs participating in baccalaureate education. Program planning must include provision for the application of content to realistic situation so the personal goals of participants can be achieved.

3. Opportunities and barriers

The results suggest that teachers have a role to play in removing the barriers often faced by distance learners. Teachers can do this by reducing feelings of isolation from teacher and program, by providing prompt and comprehensive feedback to the learner, by providing structured opportunities for teacher-student interactions, by being accessible and having structured contact times, and by considering the availability and accessibility of resource materials.

It is important to note that the roles teachers play in an off-campus environment are not dissimilar to those of on-campus faculty members. However, it may take a more conscious effort on the part of the off-campus teacher, who lacks physical contact with students, to provide the much needed interaction with these students. This premise is supported by Garrison and

Shale (1990) who suggest that the teacher is the key ingredient to a successful distance education experience.

> Teaching is not just producing and transmitting course content. A teacher is more than an information resource and an arranger of the educational environment. The emphasis on education as a collaborative process is not just to ensure voluntariness on the part of the learner but, more importantly, to ensure the integration of social and personal knowledge by challenging existing views and considering alternative perspectives (p. 125).

The preliminary findings of this study are supported by other work done by Bray (1988), von Primmer & Rossie (1988), Pym (1992), and Burge (1990) who suggest that women, in comparison to men, find contact with the teacher and other learners in a distance environment to be essential. Since the large majority of nurses are female, these findings are supportive of the need to consider the transactional role of the distance teacher as an important factor in promoting persistence. It is anticipated that from these findings, and others related to learner behaviour and program features, that a foundation for distance education for Registered Nurses will be developed within the Faculty of Nursing. I would be pleased to share more information on this study as the findings continue to unfold.

REFERENCES

Boshier, R. W. (1971). Motivational orientations of adult education participants: A factor analytic exploration of Houle's typology. Adult Education, 21(2), 3-26.

Boshier, R. W. (1977). Motivational orientations revisited: Life-space motives and the education participation scale. Adult Education, 27(2), 89-115.

Bray, C. (1988). Women's studies at a distance: Experiences of students and tutor. Canadian Journal of University Continuing Education,14(2), 37-49.

Burge, E. J. (1990). Women as learners: Issues for visual and virtual classrooms. Canadian Journal for the Study of Adult Education, 4(2), 1-24.

Colaizzi, P. (1978). Psychological research as the phenomenologist views it. In R. Vaile & M. King (Eds.), Existential-phenomenological alternatives for psychology (pp. 48-71). New York: Oxford University Press.

Cross, K. P. (1981). Adults as learners: Increasing participation and facilitating learning. San Francisco: Jossey-Bass.

Garrison, D. R., & Shale, D. (1990). A new framework and perspective. In D. R. Garrison & D. Shale (Eds.), Education at a distance (pp. 123-134). Malabar, FL: Krieger.

Guba, E. , & Lincoln, Y. (1989). Judging the quality of fourth generation evaluation. In E. Guba & Y. Lincoln (Eds.), Fourth generation evaluation (pp. 228-251).

Holmberg, B. (1983). Guided didactic conversation in distance education. In D. Stewart, D. Keegan, & B. Holmberg (Eds.), Distance education: International perspectives (pp. 114-122). London: Routledge.

Keegan, D. (1986). Foundations of distance education. London: Routledge.

Maslow, A. H. (1970). Motivation and personality. New York: Harper-Collins.

Munhall, P. L. (1994). Revisioning phenomenology: Nursing and health science research. New York: National League for Nursing Press.

Oiler, C. (1983). Phenomenology: A method for nursing research. Advances in Nursing Science, 5(2), 49-63.

Pym, F. R. (1992). Women and distance education: A nursing perspective. Journal of Advanced Nursing, 17, 383-389.

Rubenson, K. (1977). Participation in recurrent education: A research review. Paris: Center for Educational Research and Innovation, Organization for Economic Cooperation and Development.

Sandelowski, M. (1986). The problem of rigour in qualitative research. Advances in Nursing Science, 8(3), 27-37.

Swanson-Kauffman, K. M., & Schonwald, E. (1988). Phenomenology. In B. Sater (Ed), Paths to knowledge (pp. 97-105). New York: National League for Nursing Press.

Van Kaam, A. (1959). Phenomenal analysis: Exemplified by a study of the experience of "really feeling understood". Journal of Individual Psychology, 15, 66-72.

von Primmer, C., & Rossie, U. (1988). Gender and distance education at the FernUniversitat. Open Learning, 3(2), 3-12.